TITLE: MICROBIOLOGIST I - III

DEFINITION: Under general supervision, performs or supervises staff performing microbiological, molecular, biochemical, serological, chemical, hematological, and blood type testing and other services for the detection, diagnosis, treatment and control of diseases and environmental health hazards in a public health laboratory.

DISTINGUISHING CHARACTERISTICS:

Grade Level I - Performs the duties of the classification under close supervision.

Grade Level II - Performs the duties of the classification under general supervision; may act in lead capacity over Microbiologist I's and other technical/professional staff. Two years of recent experience as a certified Public Health Microbiologist in a public health laboratory. A Masters degree in Medical or Public Health Microbiology or closely related field may be substituted for one year of the required experience.

Grade Level III - Supervises Microbiologist I's and II's and other laboratory staff and acts as the Technical Supervisor in accordance with the Clinical Laboratory Improvement Amendments of 1988 (CLIA) or the Technical/QA Manager in accordance with the accreditation guidelines by the American Industrial Hygiene Association (AIHA). Grade III requires current: (1) qualification as a Technical Supervisor in accordance with CLIA; OR (2) qualification as a Technical/QA Manager in accordance with accreditation guidelines by AIHA.

EXAMPLES OF DUTIES:

- Performs complex technical procedures for the detection, isolation and identification of infectious disease agents, including emerging pathogens;
- Performs screening and supplemental tests on blood specimens for detection of sexually transmitted diseases, HIV, hepatitis viruses and other infectious diseases;
- Examines food and water samples for detection of microbiological pathogens;
- Performs moderately complex clinical testing including clinical chemistry, toxicology, hematology and blood lead;
- Implements and/or performs molecular diagnostic techniques to provide more sensitive and specific results;
- May perform chemical analysis of environmental samples when required;
- Validates and interprets scientific laboratory test data, keeps records and prepares routine reports;

- Enters patient information and test results in automated lab data system and compiles statistics;
- Utilizes independent action and judgment in resolving equivocal or indeterminate results;
- Performs quality control and quality assurance procedures;
- Complies with safety rules and regulations while working in the laboratory;
- Assists in orientation of new staff members, other department staff and in lab presentations for outreach;
- Undertakes special training for new procedures and assists in the development of procedure manuals for use by other staff;
- Performs preventive maintenance procedures on equipment and instruments;
- Troubleshoots equipment problems using manuals and/or telephone consultations with equipment representatives;
- Performs other related duties as required.

In addition to the above, Microbiologist III employees perform the following duties:

- Plans, assigns, coordinates, trains, and supervises the work of the testing staff;
- Makes testing, equipment and materials recommendations;
- Implements new diagnostic methodologies and ensures establishment of a sound technique with proper validation and evaluation;
- Evaluates performance and competency levels of staff in compliance with City Personnel requirements and certifying agency mandates;
- Functions as Data Manager, setting up new options, creating worksheets for rew tests, and working with Laboratory Information Systems (LIS) software vendor in development of new software;
- Prepares statistical analyses and special reports evaluating the results of laboratory tests performed by level I and II staff and recommends appropriate action;
- Initiates and monitors vendor contracts;
- Assists in preparing reports for the department including the annual budget;
- Acts as the Laboratory Services Officer in his/her absence;
- Functions as a liaison between the laboratory and other clinic programs in the department, solving problems, providing in-service training;
- May evaluate staff training needs, develop training materials, and conduct or coordinate training;
- May develop marketing strategies;
- May coordinate and monitor quality assurance, preventive maintenance, laboratory safety and proficiency testing programs to ensure compliance with all federal, state, and local regulatory mandates related to laboratory licensure and accreditation;

reviews and revises when appropriate all procedure and quality assurance manuals; and holds monthly Quality Assurance meetings with professional and technical staff;

- May assist in policy formulation and implementation;
- May testify in court on results of laboratory analysis.

MINIMUM REQUIREMENTS:

Possess one of the following:

- 1. A valid permanent California Public Health Microbiologist Certificate, **OR**
- 2. A valid temporary California Public Health Microbiologist Certificate and must be eligible to take the next State examination, and receive a valid permanent California Public Health Microbiologist Certificate.

Willingness to work nights, weekends, holidays or during health emergencies as needed;

Some positions may be required to possess a valid drivers license.

HISTORY:

Microbiologist

Established: 01/02/1976Revised: 04/26/1983

- Grade levels I/II/III added and Microbiologist Supervisor consolidated with Microbiologist:
- Approval/Adoption Date: 11/07/01

Microbiologist Supervisor

- Established 05/04/1973
- Revised: 03/14/1983